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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/770,010	01/25/2001	Cynthia M. Merkin	16356.583 (DC-02750)	5198
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HAYNES AND BOONE, LLP			LE, DIEU MINH T	
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51155110, 111	,,,,,,		2184	
			DATE MAILED: 10/27/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

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25	Application No.	Applicant(s)				
	09/770,010	MERKIN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Dieu-Minh Le	2184				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
Period for Reply	NO DEDIVIO DET TO EVOIDE AL	AONTHAN EDOM				
A SHORTENED STATUTORY PERIOD FO THE MAILING DATE OF THIS COMMUNION. - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) - If NO period for reply is specified above, the maximum state. - Failure to reply within the set or extended period for reply within the set or extended period for reply within the set or extended period for months after the communication. See 37 CFR 1.704(b). Status	CATION. of 37 CFR 1.136(a). In no event, however, may a unication. of days, a reply within the statutory minimum of the tutory period will apply and will expire SIX (6) MC will, by statute, cause the application to become A	reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this communication. NBANDONED (35 U.S.C. § 133).				
1) Responsive to communication(s) file	ed on <u>07 November 2002</u> .					
· <u> </u>	2b)⊠ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.						
4a) Of the above claim(s) is/ard	e withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-20</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restrict Application Papers	ion and/or election requirement.					
9)☐ The specification is objected to by the	Examiner.					
10) The drawing(s) filed on is/are:	a) ☐ accepted or b) ☐ objected to by	the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11)⊠ The proposed drawing correction filed on <u>20 <i>February 2002</i></u> is: a)⊠ approved b)⊡ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to	by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim	for foreign priority under 35 U.S.C	§ 119(a)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
<u> </u>	documents have been received.					
<u> </u>	documents have been received in					
 3. Copies of the certified copies of application from the Internation * See the attached detailed Office action 	ational Bureau (PCT Rule 17.2(a))					
14) Acknowledgment is made of a claim fo	·					
a) The translation of the foreign land	- • •					
Attachment(s)	,,					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PT 3) Information Disclosure Statement(s) (PTO-1449) Pa	ΓO-948) 5) ☐ Notice ο	v Summary (PTO-413) Paper No(s) f Informal Patent Application (PTO-152)				

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Part III DETAILED ACTION

Specification

1. Claims 1-20 are presented for examination.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

 Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that

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was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable Aguilar et al. (US Patent 6,446,203 hereafter referred to as Aguilar) in view of Basu (US Patent 5,842,011).

As per claim 1:

Aguilar substantially teaches the invention. Aguilar teaches:

- a system comprising:
- a computer system including a processor and a memory
 [fig. 1, abstract, col. 1, lines 8-11 and col. 2, lines 64
 through col. 3, line 20];
- retrieve a preboot image (i.e., previous boot image) and execute the preboot image (i.e., previous boot image) [fig. 3, col. 5, lines 31-47];
- detecting a status indication associated with a previous boot attempt by the computer system [col. 1, lines 67 through col. 2, lines 11];

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- in response to the status indication indicating a local boot attempt state [col. 2, lines 31-36 and col. 6, lines 13-15];
- retrieving a first boot mage and booting the computer system using the first boot image [col. 1, lines 35-67 and col. 4, lines 3-17].

Aguilar does not explicitly teach:

- first and second remote locations.

3, col. 1, lines 1-12 and lines 49-65]

However Aguilar does disclose capability of:

- a method and system for selecting from multiple boot images to be loaded in a data processing system for booting a computer with one of multiple boot images [abstract, fig.
- comprising:
 - a connectivity among multiple CPUs, boot device, memory system, and other computing devices [fig. 1-2, col. 2, lines 64 through col. 3, lines 20];
 - first, second, and local boot images retrieved from multiple boot devices in responding to computer system (i.e., remote locations) [fig. 3, col. 1, lines55-63 and col. 2, lines 31-36];

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- a networking-based boot images to support distributed processor across a variety of products in a multiple platform, and/or client environment (i.e., remote locations) [col. 4, lines 49 through col. 5, lines 6];
- a BIOS based boot image and a network based boot image are also available for boot image [col. 5, lines 44-46].

In addition, Basu explicitly teaches:

- a system and method for booting a client workstation from remote location over a network [abstract, fig. 4A-D, col.
- 2, lines 20-29];

comprising:

- booting computer system via remote boot procedure over a network [col. 2, lines 20-29];
- booting from client/server environment (i.e., remote
 location booting) [col. 4, lines 3-14];
- a local booting from local image of the bootable code [col. 2, lines 37-40];

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made first, to realize the Aguilar's method and system for selecting from multiple boot images to be loaded in a data processing

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system for booting a computer with one of multiple boot images comprising first, second, and local boot images retrieved from multiple boot devices in responding to computer system (i.e., remote locations) as well as a networking-based boot images to support distributed processor across a variety of products in a multiple platform, and/or client environment (i.e., remote locations) as being the first and second remote locations as claimed by Applicant. This is because the Aquilar's method and system for selecting from multiple boot images to be loaded in a data processing does perform the computer booting over the networking (i.e., booting from remote locations) by multiple boot images in supporting the computer continuity operation. Aguilar clearly demonstrated the computer booting process, configuration, and networking within the computer process system; second, one would modify the Aguilar's method and system for selecting from multiple boot images to explicitly including the booting computer system via remote boot procedure over a network and booting from client/server environment (i.e., remote location booting) as taught by Basu's system and method for booting a client workstation from remote location over a network in supporting the computer data/system connectivity error/failure detection and restoration via the computer booting process over local and networking booting environment.

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This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to provide the computer systems connectivity with booting data/communication path error detection and correction (i.e., fault-resilient boot) via booting local and networking remote capability with a mechanism to enhance the computer booting configuration, performance, availability, and operation in ordering to providing an optimal booting or data/information error detection and correction system. It is further obvious because by utilizing this approach, the computer devices or systems with booting procedure or error detection and correction (i.e., booting locally and networking remotely) capabilities can be realized in:

- first, any error, or failure occurred within the computer system can be identified, detected, corrected via retrieving booting process, scheduling/access, data transmission control, and correct data execution via state information or status information;
- second, the computer systems can operate with a high reliability and flexibility environment which will correctly provide optimum data availability and transmission throughput among end user real-time communication and execution.

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As per claims 2-3:

Aguilar substantially teaches the invention. Aguilar teaches:

- a system

comprising:

- a computer system including a processor and a memory
 [fig. 1, abstract, col. 1, lines 8-11 and col. 2, lines 64
 through col. 3, line 20];
- in response to the status indication indicating a local boot successful state or an unknown state [col. 2, lines 31-36 and col. 6, lines 13-15];
- a status indication associated with a previous boot attempt by the computer system [col. 1, lines 67 through col. 2, lines 11];

Aguilar does not explicitly teach:

- an administrator notification.

However Aguilar does disclose capability of:

- a method and system for selecting from multiple boot images to be loaded in a data processing system for booting a computer with one of multiple boot images [abstract, fig. 3, col. 1, lines 1-12 and lines 49-65]

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comprising:

- a connectivity among multiple CPUs, boot device, memory system, and other computing devices [fig. 1-2, col. 2, lines 64 through col. 3, lines 20];

- a means or a configuration memu (i.e., the administrator)

for managing and setting indicator and boot sequence within

the computer system for all of first, second, and local boot

images retrieved from multiple boot devices in responding to

computer system [fig. 3, col. 1, lines55-63 and col. 2, lines

31-36] as well as a networking-based boot images to support

distributed processor across a variety of products in a

multiple platform, and/or client environment [col. 4, lines 49

through col. 5, lines 6].

In addition, Basu explicitly teaches:

- a system and method for booting a client workstation from remote location over a network [abstract, fig. 4A-D, col.
- 2, lines 20-29];

comprising:

- an operating system task used to performing the computer system booting scheduling, accessing remote booting, etc...

(i.e., the administrator) [col. 3, lines 26-42]

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- booting computer system via remote boot procedure over a network [col. 2, lines 20-29];
- booting from client/server environment (i.e., remote
 location booting) [col. 4, lines 3-14];
- a local booting from local image of the bootable code [col. 2, lines 37-40].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made first, to realize the Aguilar's method and system for selecting from multiple boot images to be loaded in a data processing system for booting a computer with one of multiple boot images comprising a means or a configuration memu (i.e., the administrator) for managing and setting indicator and boot sequence within the computer system as being the an administrator notification as claimed by Applicant. This is because the Aquilar's method and system for selecting from multiple boot images to be loaded in a data processing does perform the configuration and management or administration computer booting over the networking (i.e., booting from remote locations) by multiple boot images in supporting the computer continuity operation; second, one would modify the Aguilar's method and system for selecting from multiple boot images to

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explicitly including the an operating system task used to performing the computer system booting scheduling, accessing remote booting, etc... (i.e., the administrator) along with booting computer system via remote boot procedure over a network and booting from client/server environment (i.e., remote location booting) as taught by Basu's system and method for booting a client workstation from remote location over a network in supporting the computer data/system connectivity error/failure detection and restoration via the computer booting process over local and networking booting environment.

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so to provide the computer systems connectivity with booting data/communication path error detection and correction (i.e., fault-resilient boot) via booting local and networking remote capability with a mechanism to enhance the computer booting configuration, performance, availability, and operation in ordering to providing an optimal booting or data/information error detection and correction system.

As per claims 4-5:

Aguilar substantially teaches the invention. Aguilar teaches:

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- a system

comprising:

- a computer system including a processor and a memory
 [fig. 1, abstract, col. 1, lines 8-11 and col. 2, lines 64
 through col. 3, line 20];
- in response to the status indication indicating a local boot successful state or an unknown state [col. 2, lines 31-36 and col. 6, lines 13-15];
- a status indication associated with a previous boot attempt by the computer system [col. 1, lines 67 through col. 2, lines 11];
- retrieving a first boot mage and booting the computer system using the first boot image [col. 1, lines 35-67 and col. 4, lines 3-17].
- a BIOS based boot image and a network based boot image are also available for boot image [col. 5, lines 44-46].

In addition, Basu explicitly teaches:

- a system and method for booting a client workstation from remote location over a network [abstract, fig. 4A-D, col.
- 2, lines 20-29];

comprising:

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- booting computer system via remote boot procedure over a network [col. 2, lines 20-29];
- booting from client/server environment (i.e., remote
 location booting) [col. 4, lines 3-14];
- a local booting from local image of the bootable code [col. 2, lines 37-40].

As per claims 6-7:

Aguilar substantially teaches the invention. Aguilar teaches:

- a system

comprising:

- a computer system including a processor and a memory
 [fig. 1, abstract, col. 1, lines 8-11 and col. 2, lines 64
 through col. 3, line 20];
- retrieve a preboot image (i.e., previous boot image) and execute the preboot image (i.e., previous boot image) [fig. 3, col. 5, lines 31-47];
- retrieving a first boot mage and booting the computer system using the first boot image [col. 1, lines 35-67 and col. 4, lines 3-17].

Aguilar does not explicitly teach:

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- first and second servers and remote locations.

However Aguilar does disclose capability of:

- a method and system for selecting from multiple boot images to be loaded in a data processing system for booting a computer with one of multiple boot images [abstract, fig. 3, col. 1, lines 1-12 and lines 49-65]
- comprising:
 - a connectivity among multiple CPUs, boot device, memory system, and other computing devices [fig. 1-2, col. 2, lines 64 through col. 3, lines 20];
 - first, second, and local boot images retrieved from multiple boot devices in responding to computer system (i.e., remote locations) [fig. 3, col. 1, lines55-63 and col. 2, lines 31-36];
 - a networking-based boot images to support distributed processor across a variety of products in a multiple platform, and/or clients environment (i.e., remote/server locations)

 [col. 4, lines 49 through col. 5, lines 6];
 - a BIOS based boot image and a network based boot image are also available for boot image [col. 5, lines 44-46].

In addition, Basu explicitly teaches:

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- a system and method for booting a client workstation from remote location over a network [abstract, fig. 4A-D, col.

2, lines 20-29];

comprising:

- booting computer system via remote boot procedure over a network [col. 2, lines 20-29];
- booting from client/server environment (i.e., remote location booting) [col. 4, lines 3-14];
- a local booting from local image of the bootable code [col. 2, lines 37-40];

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made first, to realize the Aguilar's method and system for selecting from multiple boot images to be loaded in a data processing system for booting a computer with one of multiple boot images comprising first, second, and local boot images retrieved from multiple boot devices in responding to computer system (i.e., remote/server locations) as well as a networking-based boot images to support distributed processor across a variety of products in a multiple platform, and/or client environment (i.e., remote/server locations) as being the first and second remote locations as claimed by Applicant. This is because the

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Aguilar's method and system for selecting from multiple boot images to be loaded in a data processing does perform the computer booting over the networking (i.e., booting from remote locations) by multiple boot images in supporting the computer continuity operation. Aguilar clearly demonstrated the computer booting process, configuration, and networking within the computer process system; second, one would modify the Aquilar's method and system for selecting from multiple boot images to explicitly including the booting computer system via remote boot procedure over a network and booting from client/server environment (i.e., remote location booting) as taught by Basu's system and method for booting a client workstation from remote location over a network in supporting the computer data/system connectivity error/failure detection and restoration via the computer booting process over local and networking booting environment for the same reasons set forth as described in claim 1, supra.

As per claim 8:

Aguilar substantially teaches the invention. Aguilar teaches:

- a system comprising:

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- a computer system including a processor and a memory
 [fig. 1, abstract, col. 1, lines 8-11 and col. 2, lines 64
 through col. 3, line 20];
- a non-volatile memory configured to store status indication [col. 1, lines 67 through col. 2, lines 14];
 - in response to the status indication indicating a local boot attempt state [col. 2, lines 31-36 and col. 6, lines 13-15].

As per claims 9-13:

These claims are the same as per claims 1-8. The only minor different is that these claims are directed to computer program product instead of the computer system including a processor and a memory as well as the method performed by a computer system as described in claims 1-8 and 14-20, respectively. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to realized that the article with computer program product is a necessary item for such communication devices including remote device or client-server networking system, more specifically, data communication or transmission booting among computer system and remote computer system or client-server system. Since the computer system and remote computer data transmission or client-server transmission

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obviously needs a means for instruction or code means or boot images resided within the computer program product for performing the data storing, receiving, detecting, tracking, monitoring, repairing, restarting, booting, and transmitting operation capabilities. Therefore, these claims are also rejected under the same rationale applied against claims 1-8 and 14-20, respectively.

As per claims 14-20:

Due to the similarity of claims 14-20 to claims 1-8 except for a method performed by a computer system steps (i.e., detecting a status indication step, retrieving a first boot image step, booting the computer system step, etc...) instead of a computer system including a processor and a memory capabilities ((i.e., detecting a status indication, retrieving a first boot image, booting the computer system, etc...); therefore, these claims are also rejected under the same rationale applied against claims 1-8. In addition, all of the limitations have been noted in the rejection as per claims 1-8.

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Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- 6. A shortened statutory period for response to this action is set to expired THREE (3) months, ZERO days from the date of this letter. Failure to respond within the period for response will cause the application to be abandoned. 35 U.S.C. 133.
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dieu-Minh Le whose telephone number is (703) 305-9408. The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4:00 PM.

The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel, can be reached on (703)305-9713. The fax phone number for this Group is (703)746-7240.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(703) 746-7239, (for formal communications intended for entry)

Or:

(703) 746-7240 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

DIEU-MINH THAI LE PRIMARY EXAMINER ART UNIT 2184

DML 10/20/03